

APPENDIX D-I
SPECIAL STATUS SPECIES POTENTIALLY PRESENT IN THE PLANNING AND DECISION AREAS

Common Name	Scientific Name	Status	Habitat Characterization and General Distribution Information	Potential Presence in Planning Area (Sierra and Otero Counties)	Potential Presence in Decision Area
Plant Species					
Kuenzler hedgehog cactus	<i>Echinocereus fendleri</i> var. <i>kuenzleri</i>	FE NM End	- occurs in piñon-juniper/grass mountain habitats	present, known to occur in the Elk/Mayhill area, Otero County	present
Sacramento prickly poppy	<i>Argemone pleiacantha</i> ssp. <i>pinnatisecta</i>	FE	- occurs in riparian and arroyo habitats	present, known to occur in the Sacramento Escarpment	present, distribution narrowly extends outside the Sacramento Escarpment ACEC
Todsen's pennyroyal	<i>Hedeoma todsenii</i>	FE w/CH NM End	- occurs in piñon-juniper grass mountain habitats - critical habitat has been designated in Otero County	present, known to occur in the Sacramento Mountains south of Bent	present
Sacramento Mountains thistle	<i>Cirsium vinaceum</i>	FT	- endemic to the Sacramento Mountains where it grows on travertine deposits of natural springs - occurs in montane coniferous forest and subalpine grassland habitats	present, known to occur in the Sacramento Mountains	unlikely occurrence, habitat range is outside of Decision Area
Goodding's onion	<i>Allium gooddingii</i>	C	- occurs in montane and subalpine coniferous forests	present, known to occur in the Sacramento Mountains	unlikely occurrence, habitat range is outside of Decision Area

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Alamo beardtongue	<i>Penstemon alamosensis</i>	SC BLMS	- occurs in mixed shrub hill and arroyo habitats	present, known to occur in the Sacramento Escarpment	unlikely occurrence, distribution does not extend outside Sacramento Escarpment ACEC and therefore is not in the Decision Area
Duncan's cory cactus	<i>Coryphantha duncanii</i>	SC NM End BLMS	- occurs in creosote hill and mixed shrub mountain habitats	present, known to occur in the Mud Mountains	present
Glass Mountain coral-root	<i>Hexalectris nitida</i>	SC NM End BLMS	- occurs in grass mountain habitats	present, known to occur on private land in the Cornudas Mountains	present
Gypsum scalebroom	<i>Lepidospartum burgessii</i>	SC NM End BLMS	- occurs in salt flat habitats	present, within New Mexico, only occurs in the Guadalupe Ranch, Otero County	unlikely occurrence, distribution does not extend outside the Alkali Lakes ACEC and is therefore not in the Decision Area
Sandhill goosefoot	<i>Chenopodium cycloides</i>	SC	- occurs in grasslands and semi-desert grasslands	unlikely occurrence, not known to occur in Sierra or Otero Counties	unlikely occurrence
Sierra Blanca cliffdaisy	<i>Chaetopappa elegans</i>	SC	- occurs in montane coniferous forest habitats on igneous outcrops - endemic to the Sacramento Mountains	present, known to occur in the Sacramento Mountains	unlikely occurrence, habitat is not present in the Decision Area

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Villard's pincushion cactus	<i>Escobaria villardii</i>	SC NM End BLMS	- occurs in mixed shrub hill habitats. - endemic to the Sacramento Escarpment	present, known to occur only in the Sacramento Escarpment ACEC	unlikely occurrence, distribution does not extend outside the Sacramento Escarpment ACEC and is therefore not in the Decision Area
Wright's marsh thistle	<i>Cirsium wrightii</i>	SC	- occurs in springs and cienegas	present, potential distribution includes the base of the Sacramento Escarpment from Three Rivers to Alamogordo	potential occurrence
Desert night-blooming cereus	<i>Cereus greggii</i> var. <i>greggii</i>	SC NM End BLMS	- occurs in creosote rolling uplands and arroyo riparian habitats	potential occurrence	potential occurrence
Guadalupe rabbitbrush	<i>Chrysothamnus nauseosus</i> var. <i>texensis</i>	SC BLMS	- occurs in grass mountain habitats	present, known to occur in the Brokeoff Mountains and Guadalupe Mountains	present
Pinos Altos flameflower	<i>Talinum humile</i>	SC	- occurs in Chihuahua desert scrub habitats	unlikely occurrence	unlikely occurrence
Fish hook barrel cactus	<i>Ferocactus hamatacanthus</i> var. <i>hamatacanthus</i>	BLMS	- occurs in mixed shrub hill habitats	present, known to occur just west of the Cornudas Mountains	present

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Grama grass cactus	<i>Toumeyia papyracanthus</i>	BLMS	- occurs in grama grasslands and alkali sacaton on gypsum soils	present, known to occur in Guadalupe Ranch, McGregor Range, Lake Holloman south to Tres Hermanas	present
Guadalupe Mountains mescal bean	<i>Sophora gypsophila</i> var. <i>guadalupensis</i>	BLMS	- occurs in grass mountain and arroyo habitats	present, known to occur in the Brokeoff Mountains	present
Sheer's cory cactus	<i>Coryphantha scheeri</i> var. <i>uncinata</i>	NM End	- occurs along the creosote breaks of the Rio Grande	present, known to occur along the breaks of the Rio Grande as far north as Mud Mountain	present
Gray sibara	<i>Sibara grisea</i>	LCFOS Sensitive	- occurs in grass mountain habitats, typically in cliff habitats	present, known to occur in the Sacramento Escarpment and the Brokeoff Mountains	present
Gypsum blazingstar	<i>Mentzelia humilis</i> var. <i>guadalupensis</i>	LCFOS Sensitive	- occurs on gypsum outcrops	present, known to occur near or at Pup Canyon, Otero County	present
Gypsum ringstem	<i>Anulocaulis gypsogenus</i> var. <i>howardii</i>	LCFOS Sensitive	- occurs on gypsum outcrops in mixed shrub mountain habitats	present, known to occur near or at Pup Canyon, Otero County	present
Roetter's hedgehog cactus	<i>Echinocereus x Roetteri</i> var. <i>Roetteri</i>	LCFOS Sensitive	- occurs in Chihuahuan desert scrub and semidesert grassland habitats	present, known to occur as a large hybrid population in the Jarilla Mountains at Orogrande	present

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Mosquito plant	<i>Agastache cana</i>	NM Rare	- occurs in cold adapted evergreen woodland at intermediate elevations	present, known to occur in Sierra and Otero Counties	known to occur in Percha Creek nominated ACEC
Animal Species					
American peregrine falcon	<i>Falco peregrinus anatum</i>	NM End BLM Sensitive	- nests in cliff areas and forages near water as well as a variety of desert and woodland-brushland habitats	present, forages in most habitat types. Potential nesting habitat exists in vicinity of Sacramento Escarpment. Other areas of potential nesting habitat occur on Wind Mountains, Cornudas Mountains, and Alamo Mountain, Guadalupe Rim, Brokeoff Mountains, San Andreas Mountains, Caballo Mountains, and Black Range	present
Black-footed ferret	<i>Mustela nigripes</i>	FE	- occurs in grass flat and grass rolling upland habitats - not believed to have occurred in Sierra and Otero Counties (Hubbard and Schmitt 1983)	unlikely occurrence, considered to be extirpated from New Mexico; potential recovery habitat is considered unlikely due to the small size of the prairie dog towns	unlikely occurrence
Brown pelican	<i>Pelecanus occidentalis</i>	FE	- usually occurs in marine habitats in warm waters and rarely occurs inland	present, occasional transient birds have been documented	Unlikely occurrence in Decision Area

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Gila trout	<i>Oncorhynchus gilae</i>	FE	<ul style="list-style-type: none"> - small, cool, clear mountain streams, along which riparian vegetation provides a fairly complete canopy - deep pools are important for survival of the fish during drought 	present, populations occur in headwater streams of the Gila River and San Francisco River drainages in the Gila National Forest	Unlikely occurrence, populations are restricted to the Gila River Drainage west of the Black Range and are not in the Rio Grande drainage.
Interior least tern	<i>Sterna antillarum</i>	FE	<ul style="list-style-type: none"> - nests on sandbars, reservoir shoreline, and alkaline flats - colonial nester 	present, known to occur on the Gila National Forest, Lake Holloman, and McGregor Range (incidental occurrence - no breeding habitat present)	Potential occurrence, may occur on the playas south of Holloman Air Force Base
Northern aplomado falcon	<i>Falco femoralis septentrionalis</i>	FE NM End	<ul style="list-style-type: none"> - occurs in grass flats, grass rolling uplands, and salt flats habitats - grasslands of Otero Mesa are considered essential habitat for recovery 	potential occurrence, dispersing individuals from Mexico may utilize grasslands in Otero County	potential occurrence
Whooping crane	<i>Grus americana</i>	FE	<ul style="list-style-type: none"> - during the winter, whooping cranes roost on sand bars and forage in agricultural fields and valley pastures 	potential occurrence, during fall and winter, whooping cranes may occur in middle Rio Grande Valley	unlikely occurrence, whooping cranes are unlikely to use habitats in the Decision Area
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	FE w/PCH	<ul style="list-style-type: none"> - occurs in high quality riparian habitat with cottonwoods and willows, and occasionally salt cedar 	potential occurrence, although field surveys have not identified any individuals	potential occurrence

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Bald eagle	<i>Haliaeetus leucocephalus</i>	FT NM Thr	- occurs in riparian, arroyo, grass flat, grass rolling upland, and creosote rolling upland habitats	present, a nest site is present on private land in Sierra County; winter roosting occurs on Lincoln National Forest	present, known to roost and forage in the Decision Area.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	FT	- forages in a variety of woodland-brushland and desert habitats. Nests in dense coniferous forests on Lincoln National Forest	present, known to occur in Lincoln National Forest; primary activity centers are identified on Lincoln National Forest	present, known to forage in areas adjacent to Lincoln National Forest
Arizona black-tailed prairie dog	<i>Cynomys ludovicianus arizonensis</i>	C (BLMS)	- occurs in grass flats and grass rolling uplands habitats	present, known to occur in Otero County; historically occurred in Sierra County	present, known to occur in Otero County
Chiricahua leopard frog	<i>Rana chiricahuensis</i>	C BLMS	- occurs in a variety of permanent aquatic habitats including thermal springs and seeps, stock tanks, wells, intermittent rocky creeks, and mainstream river reaches - occurs at elevations from 3,280 to 8,530 feet	present, known to occur in Gila and San Francisco river drainages as well as the Cuchillo Negro Creek, Palomas Creek, and the Seco Creek in Sierra County; potential occurrence in Percha Creek and Animas Creek	potential occurrence
Mountain plover	<i>Charadrius montanus</i>	PT	- occurs in grass flats and grass rolling uplands habitats	present, known to occur on McGregor Range and on Otero Mesa	present

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Arizona southwestern toad	<i>Bufo microscaphus microscaphus</i>	SC BLMS	- occurs in riverine and lacustrine wetland habitats	present, known to occur in the Gila and Cibola National Forests	potential occurrence, although known distribution range is not within the Decision Area
Baird's sparrow	<i>Ammodramus bairdii</i>	SC BLMS	- occurs in grass and mesquite flats and rolling uplands, salt flats, and arroyo habitats	present	present
Big free-tailed Bat	<i>Nyctinomops macrotis</i>	SC BLMS	- primarily occurs in coniferous and mixed woodland habitats and depends on rocky cliffs for roosting	present, known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range	present
Black tern	<i>Chlidonias niger</i>	SC BLMS	- breeds and feeds along vegetated marshes with open water	present, known to occur in the White Sands Missile Range, and McGregor Range	potential occurrence
Cave myotis	<i>Myotis velifer</i>	SC BLMS	- primarily occurs in desert and lower grasslands but also in piñon-juniper woodlands	present, known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range	present
Desert bighorn sheep	<i>Ovis canadensis mexicana</i>	NM End	- occurs in arid, rocky mountains in open areas with piñon-juniper to desert scrub habitats	unlikely occurrence, animals previously reintroduced into Sierra County are no longer present	unlikely occurrence

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Desert pocket gopher	<i>Geomys bursarius arenarius</i>	SC BLMS	- occurs in lowland areas with loamy, sandy soil	present, known to occur in the vicinity of Alamogordo and Tularosa	present
Desert sucker	<i>Catostomus clarki</i>	SC BLMS	- occurs in rapids and flowing streams, except in extreme headwater situations	present, known to occur in the Gila National Forest	unlikely occurrence, may occur outside the Gila National Forest but not within the Decision Area
Ferruginous hawk	<i>Buteo regalis</i>	SC BLMS	- occurs in a wide variety of desert habitats as well as piñon-juniper/grass mountain habitats	present	present
Fringed myotis	<i>Myotis thysanodes</i>	SC BLMS	- occurs in mid elevation grasslands, desert, oak and piñon woodlands, as well as high elevation spruce-fir forests	present, known to occur in Cibola, Gila, and Lincoln National Forests, White Sands Missile Range, and McGregor Range	present
Gray-footed chipmunk	<i>Tamias canipes</i>	SC BLMS	- occurs in grass mountain, piñon juniper/grass mountain, and arroyo habitats	present, known to occur in the Lincoln National Forest, Guadalupe Mountains, and piñon-juniper habitat adjacent to McGregor Range	present
Greater western mastiff bat	<i>Eumops perotis californicus</i>	SC BLMS	- occurs in riparian and foothill habitats - roosts in high, steep cliffs	unlikely occurrence, not known to occur in Sierra or Otero Counties; few records in New Mexico	unlikely occurrence

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Guadalupe southern pocket gopher	<i>Thomomys bottae guadalupensis</i>	SC BLMS	- occurs in areas with loamy soil in a variety of habitats ranging from arid lowlands to mountains	present, known to occur in the Guadalupe Mountains	present
Loggerhead shrike	<i>Lanius ludovicianus</i>	SC BLMS	- occurs in a variety of shrub and grass habitats	present	present
Long-legged myotis	<i>Myotis volans</i>	SC BLMS	- primarily occurs in ponderosa pine and piñon-juniper habitats, as well as grassland habitats	present, known to occur in Cibola, Gila, Lincoln National Forests, White Sands Missile Range, and McGregor Range	present
Long-eared myotis	<i>Myotis evotis</i>	SC BLMS	- occurs in piñon and ponderosa pine habitats	present, known to occur in Gila and Cibola National Forests	present
Longfin dace	<i>Agosia chrysogaster</i>	SC BLMS	- habitat ranges from clear, cool mountain brooks to small intermittent desert streams with a sand or gravel substrate	present, occurs in Gila and San Francisco River drainages	present, known to occur in Percha Creek
Mineral Creek mountain snail	<i>Oreohelix pilsbryi</i>	SC	- occurs in an extremely small area along Mineral Creek	present, known to occur near Chloride on Mineral Creek	present
Neotropic cormorant	<i>Phalacrocorax brasilianus</i>	NM Thr	- generally occurs in larger bodies of water, such as reservoirs - preys on fish - require stands of trees or shrubs in or near water	present, known to nest at the Elephant Butte and Caballo Reservoirs; occasionally occurs near Alamogordo	potential occurrence, may occur as a vagrant species in the Decision Area

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New Mexican jumping mouse	<i>Zapus hudsonius luteus</i>	SC NM Thr BLMS	- occurs in riparian habitats	present, known to occur in the Sacramento Mountains in the Cloudcroft area	potential occurrence
Northern goshawk	<i>Accipiter gentilis</i>	SC BLMS	- utilizes forest, woodland, and shrubland habitats	present, known to occur in and adjacent to Lincoln and Gila National Forests	present
Occult little brown bat	<i>Myotis lucifugus occultus</i>	SC BLMS	- occurs in ponderosa pine and mixed conifer forest habitats, as well as piñon-juniper habitats	present, known to occur in Cibola, Gila, and Lincoln National Forests	present
Organ Mountains Colorado chipmunk	<i>Eutamias quadrivittatus australis</i>	SC BLMS	- endemic to the Organ Mountains	present	unlikely occurrence
Pale Townsend's big-eared bat	<i>Plecotus townsendii pallescens</i>	SC BLMS	- occurs in grass mountain, piñon-juniper, and arroyo habitats - strongly associated with caves	present, known to occur in Cibola, Gila, and Lincoln National Forests, White Sands Missile Range, and McGregor Range	present
Sacramento Mountains salamander	<i>Aneides hardii</i>	SC	- occurs in higher elevation sites characterized by Douglas-fir, true firs, spruces, and some pines with substantial canopy cover	present, known to occur only in the Sacramento, White, and Capitan Mountains	unlikely occurrence, required habitat is not present in the Decision Area
Small-footed myotis	<i>Myotis ciliolabrum</i>	SC BLMS	- occurs in creosote rolling upland habitats	present	present

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Sonora sucker	<i>Catostomus insignis</i>	SC BLMS	- occurs in a variety of habitats from warm rivers to trout streams	present, known to occur in the Gila River drainages in the Gila National Forest	unlikely occurrence, distribution is restricted to the Gila River
Southwestern otter	<i>Lutra canadensis sonorae</i>	SC	- inhabits permanent riparian habitats	unlikely occurrence, considered to be extirpated from New Mexico	unlikely occurrence
Speckled dace	<i>Rhinichthys osculus (Gila drainage)</i>	SC	- occurs in shallow, rocky, headwater streams with relatively swift flow	present, known to occur in the Gila River drainages in Gila National Forest	unlikely occurrence, distribution is restricted to the Gila River
Spotted bat	<i>Euderma maculatum</i>	SC BLMS	- occurs in grass flats, grass mountain, piñon-juniper/grass mountain, and riparian habitats	present, known to occur in Sierra County	present
Texas horned lizard	<i>Phrynosoma cornutum</i>	SC BLMS	- occurs in a variety of shrub, grass, and salt flat habitats	present	present
Western burrowing owl	<i>Speotyto cunicularia hypugea</i>	SC BLMS	- occurs in grassland habitats - nest in abandoned burrows of prairie dogs, ground squirrels, woodchucks, foxes, and badgers	present	present
White-faced ibis	<i>Plegadis chihi</i>	SC BLMS	- occurs in grass flat, salt flat, and riparian habitats - nests in shoreline and marsh habitats bordered by open water	present, known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range	potential occurrence

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White Sands pupfish	<i>Cyprinodon tularosa</i>	SC	- inhabits fine mud silt and sand gravel bottoms of clear, shallow, highly alkaline pools and streams of the Tularosa Valley	present, known to occur on the White Sands Missile Range	unlikely occurrence, known only to occur within the White Sands Missile Range
White Sands woodrat	<i>Neotoma micropus leucophaea</i>	SC	- inhabits lowland areas with sandy soils	present, known to occur in the White Sands Missile Range and is likely to occur elsewhere within the Tularosa Basin	likely occurrence
Yuma myotis	<i>Myotis yumanensis</i>	SC BLMS	- occurs in piñon-juniper/grass mountain habitat	present, known to occur in Cibola and Gila National Forests, and McGregor Range	present
Cornudas Mountains land snail	<i>Ashmunella amblya cornudasensis</i>	LCFOS Sensitive	- occurs in talus slopes in mountain habitats	present, only known to occur in the Cornudas Mountains	present, distribution extends beyond the Cornudas Mountains ACEC boundaries and therefore IS within the Decision Area

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Yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	LCFOS Sensitive	- breeds in riparian woodlands and similar habitats at lower (2,800 to 5,500 feet) and middle (5,000 to 7,500 feet) elevations	present, known to occur in the Lincoln National Forest, White Sands Missile Range, McGregor Range, and Rio Grande Valley	present

SOURCES:

M. Howard, personal communication, 1999
New Mexico Department of Game and Fish 1999a

NOTES:

Status=FE-Federally endangered FT=Federally threatened PE=Proposed endangered PT=Proposed threatened C=Candidate SC=Former Candidate Category 2 Species BLMS=BLM sensitive LCFOS=Las Cruces Field Office Sensitive NM End=New Mexico endangered NM Thr=New Mexico threatened CH=Critical habitat designated July 1999 PCH=Proposed critical habitat ACEC = Area of Critical Environmental Concern

APPENDIX D-II

SPECIAL STATUS SPECIES ACCOUNTS

FEDERALLY LISTED PLANT SPECIES

Kuenzler Hedgehog Cactus (*Echinocereus fendleri* var. *kuenzleri*) - Federally Endangered, New Mexico Endangered

The Kuenzler hedgehog cactus grows between rocks on gently sloping limestone outcrops in piñon-juniper woodlands from 5,800 to 6,600 feet elevation. This cactus is known to occur in northeast Otero and adjacent Chaves and Lincoln Counties. Within Otero County, it is known to occur on the Mescalero Apache Indian Reservation, in the Elk/Mahill area, and in the areas east of the Guadalupe Mountains. No known populations occur in Sierra County.

Sacramento Prickly Poppy (*Argemone pleiacantha* ssp. *pinnatisecta*) - Federally Endangered, New Mexico Endangered

The Sacramento prickly poppy occurs in riparian and arroyo habitats and is endemic to 10 canyons on the Sacramento Escarpment from High Rolls to Escondido Canyon in Otero County. On public land, its habitat extends approximately 1 mile onto the Escarpment pediment from the mouth of Alamo and San Andrea Canyons. The Bureau of Land Management (BLM) population of this species varies from 1 to approximately 20 plants. They are apparently the result of seeds washing down canyon from the population on the Lincoln National Forest at higher elevations. Xeric habitat conditions at the known elevations on BLM land appear to limit the species to arroyos where sufficient moisture is available to support them. Plants appear to persist only as long as environmental conditions remain moist, and plants are not removed by channel scouring. On public land, this plant occurs only within the Sacramento Escarpment Area of Critical Environmental Concern (ACEC). The main populations occur in the higher elevations on the Lincoln National Forest. Some plants also may occur on private land within this area. No populations of this species are known to occur in Sierra County.

Todsen's Pennyroyal (*Hedeoma todsenii*) - Federally Endangered, New Mexico Endangered

The Todsen's pennyroyal occurs on north and east facing steep slopes (from 6,600 to 7,400 feet elevation) in gravelly gypseous limestone soil in piñon-juniper woodland and sometimes ponderosa pine vegetation. It produces red-orange flowers that appear from July to September. Reproduction is mainly by rhizomatous cloning. This plant is known to occur only in the San Andrea Mountains on the White Sands Missile Range in Sierra County and on the other side of the Tularosa Basin in the

Sacramento Mountains in Otero County. A relatively large population occurs on public land on the western edge of the Sacramento Mountains, and a small population occurs on the adjacent Lincoln National Forest. Critical habitat has been designated on public land in Otero County.

PLANT SPECIES OF CONCERN

Duncan's Cory Cactus (*Coryphantha duncanii*) - Species of Concern, New Mexico Endangered, BLM Sensitive

This cactus occurs on alternating dolomite and chert of the Aleman formation and limestone outcrops and soils among Chihuahuan Desert shrub vegetation at 3,000 to 5,000 feet elevation. Flower petaloid parts are pink and lance-shaped, and the flowers are red. Flowering occurs from May to July. Within New Mexico, this species is known to occur only in the Mud Mountains northwest of Truth or Consequences in Sierra County.

Glass Mountain Coral-root (*Hexalectris nitida*) - Species of Concern, New Mexico Endangered, BLM Sensitive

The Glass Mountain coral-root is a saprophytic (i.e., obtains its nutrients from dead organic matter) plant that occurs under oak trees in grassy, mountain habitats. Within the Planning Area, this plant is known only to occur in an area of private land in the Cornudas Mountains in Otero County. It also may occur elsewhere in New Mexico.

Wright's Marsh Thistle (*Cirsium wrightii*) - Species of Concern

The Wright's marsh thistles occurs in spring and cienega habitats. This thistle may occur in Otero County and its potential distribution includes the base of the Sacramento Escarpment from Three Rivers to Alamogordo (Howard 1999).

Desert Night-blooming Cereus (*Cereus greggii* var. *greggii*) - Species of Concern, New Mexico Endangered, BLM Sensitive

The night-blooming cereus grows in washes or flats, often under bushes or shrubs, at approximately 3,000 to 5,000 feet elevation. The flowers are white, opening at nights, about 8 inches long, and appear in June. The plants are popular with cactus collectors and populations have been decimated by collectors. This cactus may occur in Sierra or Otero County, although no populations are known to be present.

Guadalupe Rabbitbrush (*Chrysothamnus nauseosus* var. *texensis*) - Species of Concern, BLM Sensitive

The Guadalupe rabbitbrush occurs in limestone cliffs and streambeds at elevations of 4,900 to 7,000 feet. This low, spreading shrub has yellow flowers and is unique in having a long stigma and short pappus. This plant is known to occur in the Brokeoff and Guadalupe Mountains in Otero County. Other populations occur in the Guadalupe Mountains in Eddy County, New Mexico, and Culberson County, Texas.

BLM SENSITIVE SPECIES

Fish Hook Barrel Cactus (*Ferocactus hamatacanthus* var. *hamatacanthus*) - BLM Sensitive

The fish hook cactus occurs in mixed shrub hill habitats. This cactus was reported to occur just west of the Cornudas Mountains in Otero County.

Grama Grass Cactus (*Toumeyia papyracanthus*) - BLM Sensitive

The grama grass cactus occurs in open flats in grasslands and piñon-juniper woodlands on sandy-gravelly and occasionally gypseous soils at 5,000 to 7,300 feet elevation. At one time, this species may have had a considerably larger range and may have been more abundant. Increased grazing has decreased the numbers of cactus. This cactus is located primarily in northern, central, and southern New Mexico as well as central Arizona. It is known to occur in Otero County on the Guadalupe Ranch, McGregor Range, and in the Tularosa Basin from Lake Holloman to Tres Hermanas. The range has been discovered to be larger than thought originally; however, population numbers within this range are likely reduced due to various land use practices.

Guadalupe Mountains Mescal Bean (*Sophora gypsophila* var. *guadalupensis*) - BLM Sensitive

The Guadalupe Mountains mescal bean occurs in grass mountain and arroyo habitats. This plant is a rare endemic to the Guadalupe-Brokeoff Mountain range and is known to occur in the Brokeoff Mountains in Otero County.

NEW MEXICO ENDANGERED SPECIES

Sheer's Cory Cactus (*Coryphantha scheeri* var. *uncinata*) - New Mexico Endangered

The Sheer's cory cactus occurs along the Rio Grande in creosote breaks as far north as the Mud Mountains. Its habitat is disappearing due to urbanization along the Rio Grande. This cactus occurs in Dona Ana and Sierra Counties in New Mexico as well as in Texas and New Mexico (Sivinski and Lightfoot 1995).

BLM LAS CRUCES FIELD OFFICE (LCFO) SENSITIVE SPECIES

Gray Sibara (*Sibara grisea*) - BLM LCFO Sensitive

The gray sibara occurs in grass mountain habitats, typically in limestone cliffs and crevices. This plant is known to occur in Chaves, Eddy, and Otero Counties in New Mexico and in Texas. In Otero County, it is known to occur in the Sacramento Escarpment and the Brokeoff Mountains (Sivinski and Lightfoot 1995).

Gypsum Blazingstar (*Mentzelia humilis* var. *guadalupensis*) - BLM LCFO Sensitive

The gypsum blazingstar occurs on gypsum outcrops on sloping hillsides. This plant is known to occur on the west face of the Guadalupe Mountains near or at the mouth of Pup Canyon in Otero County (Howard 1999).

Gypsum Ringstem (*Anulocaulis leisolenus* var. *howardii*) - BLM LCFO Sensitive

The gypsum ringstem occurs on gypsum outcrops in mixed shrub mountain habitats. This plant is known to occur on the west face of the Guadalupe Mountains near or at the mouth of Pup Canyon in Otero County (Howard 1999).

Roetter's Hedgehog Cactus (*Echinocereus* x *Roetteri* var. *Roetteri*) - BLM LCFO Sensitive

The Roetter's hedgehog cactus occurs in Chihuahuan desert scrub and semidesert grassland habitats. Its attractive flowers and uniqueness make it susceptible to plant collectors. This hybrid cactus occurs as a large population in the Jarilla Mountains at Orogrande in Otero County (Howard 1999).

NEW MEXICO RARE SPECIES

Mosquito Plant (*Agastache cana*) - New Mexico Rare

The mosquito plant occurs in cold adapted evergreen woodland at intermediate elevations. This habitat is widespread throughout New Mexico, and usually occurs at elevations between 5,500 feet to 7,500 feet. It is known to occur in Dona Ana, Grant, Lincoln, Luna, Otero, and Sierra Counties.

FEDERALLY LISTED, PROPOSED, AND CANDIDATE ANIMAL SPECIES

Interior Least Tern (*Sterna antillarum*) - Federally Endangered

The interior least tern nests in colonies on sandy beaches on shorelines of streams, rivers, and alkaline flats. It is a vagrant along the Rio Grande corridor and known to occur on the Gila National Forest and at Lake Holloman and incidental occurrences have been reported on McGregor Range (New Mexico Department of Game and Fish [NMDGF] 1999a).

Northern Aplomado Falcon (*Falco femoralis septentrionalis*) - Federally Endangered, New Mexico Endangered

Habitat known to be utilized by aplomado falcons consists of desert grasslands with scattered mesquite and yucca, riparian woodlands in open grasslands, and among yucca-covered sand ridges in coastal prairies. Aplomado falcons are not known to build their own nests, and in the southwestern United States, they use previously constructed nests located in the saddle of branched yuccas, in mesquites, or on the tops of crucifixion bushes (BLM 1996).

Aplomado falcons were believed to have been extirpated in the United States since the late 1950s. Recently, a population of aplomado falcons was confirmed in the extensive grassland communities of northern Mexico. In addition, three reports of aplomado falcons were verified on or adjacent to the White Sands Missile Range during 1991 and 1992. A third observation was made on U.S. Highway 380 between Carrizo and San Antonio, New Mexico in 1992. In 1995, the only known active nest was documented in Cameron County, Texas. This is the first documented nesting in the United States since 1952 (BLM 1996). Seven sightings were made within the Planning Area in 1999 (Howard, personal communication, 1999). No critical habitat has been identified within the United States. Areas of potential aplomado falcon habitat have been identified in Sierra and Otero Counties in grassland areas.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) - Federally Endangered

The southwestern willow flycatcher is a species that has specialized in the use of cottonwood/willow riparian habitats for nesting. The species migrates into the southwest United States from Mexico and Central America by mid-May. Breeding, nesting, and rearing are completed by early July. Breeding range, as depicted by Hubbard (1987), follows along the eastern boundary of the Rio Grande Valley from El Paso northward and deviates easternly in Torrance County to the east side of the Sangre de Cristo Mountains. However, specimens of *E.t. extimus* have been taken during migration in Roosevelt County in 1975 and 1976. While this leaves breeding occurrence of the species east of the Rio Grande in question, there have been no verified accounts of breeding reported east of Hubbard's 1987 breeding habitat boundary to date. This suggests that the occurrence of *E.t. extimus* in the Planning Area is unlikely (BLM 1997).

The species is threatened by modification and loss of riparian habitats, and by nest parasitism by brown headed cowbirds. There is no critical habitat in Sierra and Otero Counties. Potential habitat, of low quality, occurs in the Planning Area at Three Rivers Petroglyph Site ACEC, Palomas Creek, Percha Creek, Laborcita Canyon, and Tierra Blanca Creek (U.S. Fish and Wildlife Service [USFWS] 1997).

Bald Eagle (*Haliaeetus leucocephalus*) - Federally Threatened, New Mexico Threatened

The bald eagle occurs in New Mexico mainly as a migrant and a winter resident. It primarily occurs in riparian areas adjacent to rivers, reservoirs, and ponds, and roosts in large trees that may be close to foraging areas. Other foraging habitats include grass flats, rolling uplands, and creosote rolling upland habitats. Rabbits, fish, and waterfowl are the primary prey items. One bald eagle nest is known to occur on private land in Sierra County.

Mexican Spotted Owl (*Strix occidentalis lucida*) - Federally Threatened

The Mexican spotted owl occurs in varied habitat consisting primarily of mature montane forest. Uneven-aged stands with high canopy closure, high tree density, multilayered canopy, and a terrain with slopes greater than 15 degrees appear to be key habitat characteristics in forested habitats. Nest sites have been identified on the Lincoln National Forest, and individual birds have been observed foraging east of Lincoln National Forest. Primary activity centers (PACs) have been identified on the Lincoln National Forest. Nesting also occurs in the Gila National Forest.

Mountain Plover (*Charadrius montanus*) - Proposed Threatened

The mountain plover is associated with shortgrass and shrub-steppe landscapes throughout its breeding and wintering range. Breeding occurs in the Rocky Mountain states from Canada to Mexico with most breeding birds occurring in Montana and Colorado. Most wintering birds occur in California and some occur in Arizona, Texas, and Mexico (USFWS 1999). Conversion of grassland habitats, agricultural practices, grazing, and the decline of native herbivores have likely resulted in the decline of this species. Mountain plovers are known to occur in Otero County on McGregor Range and Otero Mesa.

Arizona Black-tailed Prairie Dog (*Cynomys ludovicianus arizonensis*) - Federal Candidate, BLM Sensitive

The Arizona black-tailed prairie dog occurs on flat, dry, open grasslands of mesa tops or valley bottoms within the broad limits of the Upper Sonoran Zone. It is known to occur in Otero County on McGregor Range and Otero Mesa (NMDGF 1999a). This species historically occurred in Sierra County.

Chiricahua Leopard Frog (*Rana chiricahuensis*) - Federal Candidate, BLM Sensitive

This frog occurs in a variety of permanent aquatic habitats including thermal springs and seeps, stock tanks, wells, intermittent rocky creeks, and mainstream river reaches. It occurs at elevations from 3,280 to 8,530 feet (NMDGF 1999a). The Chiricahua leopard frog is known to occur in the Gila and San Francisco River drainages, as well as the Cuchillo Negro Creek, Palomas Creek, and the Seco Creek in Sierra County. It has the potential to occur in Percha Creek and Animas Creek (Howard 1999). Population declines may be the result of predation and competition from bullfrogs or predation by introduced fishes (NMDGF 1999a).

ANIMAL SPECIES OF CONCERN

American Peregrine Falcon (*Falco peregrinus anatum*) - New Mexico Endangered, BLM Sensitive

This species nests on steep rocky cliffs, often near water, and often near piñon-juniper habitats. It often forages near water, but also is documented as foraging in most habitat types throughout the Sierra and Otero Counties. Potential nesting habitat exists within the vicinity of the Sacramento Escarpment due to the presence of numerous large cliff faces. Most of these cliffs occur within the Lincoln National Forest, immediately adjacent to the existing Sacramento ACEC. In addition, a small amount of potential nesting habitat may occur on Wind Mountain, Cornudas Mountain, Alamo Mountain,

Guadalupe Rim, Brokeoff Mountain, San Andrea Mountain, Caballo Mountains, and the Black Range (Howard 1999).

Arizona Southwestern Toad (*Bufo microscaphus microscaphus*) - Species of Concern, BLM Sensitive

The Arizona southwestern toad occurs in riverine and lacustrine wetland habitats. Its range includes Arizona, New Mexico, Utah, and Mexico. It is known to occur in the Gila and Cibola National Forests in Sierra County (NMDGF 1999a).

Baird's Sparrow (*Ammodramus bairdii*) - Species of Concern, New Mexico Threatened, BLM Sensitive

The Baird's sparrow occurs in grass and mesquite flats and rolling uplands, salt flats, and arroyo habitats. Its winter range includes New Mexico, Arizona, and Oklahoma, and areas south of the United States. Within Sierra and Otero Counties, it is generally considered to be a migratory species. It is known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range (NMDGF 1999a).

Big Free-tailed Bat (*Nyctinomops macrotis*) - Species of Concern, BLM Sensitive

This bat appears to prefer coniferous and mixed woodland habitats, but have been taken in a variety of habitats. It is dependent on rocky cliffs with cracks and fissures for roosting. It is known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range (NMDGF 1999a).

Black Tern (*Chlidonias niger*) - Species of Concern, BLM Sensitive

The black tern forages and breeds in vegetated marshes with areas of open water. It is considered to be an uncommon summer migrant species in Sierra and Otero Counties and has been observed in the White Sands Missile Range and McGregor Range (NMDGF 1999a).

Cave Myotis (*Myotis velifer*) - Species of Concern, BLM Sensitive

The cave myotis primarily occurs in desert and lower grasslands, but also in piñon-juniper woodlands. It inhabits mine shafts, tunnels, caves, and bridges (NMDGF 1999a). Its range includes New Mexico,

Arizona, Texas, Oklahoma, and Utah. Within Sierra and Otero Counties, it is known to occur in the Gila and Lincoln National Forests, White Sands Missile Range, and McGregor Range (NMDGF 1999a).

Desert Pocket Gopher (*Geomys bursarius arenarius*) - Species of Concern, BLM Sensitive

The desert pocket gopher inhabits lowland areas with loamy, sandy soils. It tends to avoid areas with sandy or rocky soils (Bogan 1999). It is known to occur in Otero County in the vicinity of Alamogordo and Tularosa, but is not known to occur in Sierra County (Bogan 1999).

Ferruginous Hawk (*Buteo regalis*) - Species of Concern, BLM Sensitive

The ferruginous hawk utilizes open grasslands and prairies, especially for nesting. It occurs in New Mexico both as a winter migrant and a nesting resident. It is present in Sierra and Otero Counties as a migrant (BLM 1997).

Fringed Myotis (*Myotis thysanodes*) - Species of Concern, BLM Sensitive

This bat primarily occurs in mid-elevation grasslands, desert, oak and piñon woodlands, but also in high-elevation spruce-fir forests. The range of this species includes New Mexico, Arizona, Colorado, and Texas. It occurs in both Sierra and Otero Counties and specifically is known to occur in Cibola, Gila, and Lincoln National Forests, White Sands Missile Range, and McGregor Range (NMDGF 1999a).

Gray-footed Chipmunk (*Tamias canipes*) - Species of Concern, BLM Sensitive

The gray-footed chipmunk primarily inhabits forest habitats, but also utilizes piñon-juniper and arroyo habitats. The range of this species includes New Mexico and Texas. Within Otero County, this species is known to occur in the Lincoln National Forest and the Guadalupe Mountains, as well as in piñon-juniper habitats adjacent to McGregor Range (NMDGF 1999a).

Guadalupe Southern Pocket Gopher (*Thomomys bottae guadalupensis*) - Species of Concern, BLM Sensitive

The Guadalupe southern pocket gopher occurs in areas with loamy soil in a variety of habitats ranging from arid lowland to mountains. It tends to avoid areas with rocky soils (Bogan 1999). It is known to

occur in the Guadalupe Mountains in Eddy County, New Mexico, and also may occur in the Guadalupe Mountains in Otero County (Bogan 1999).

Loggerhead Shrike (*Lanius ludovicianus*) - Species of Concern, BLM Sensitive

The loggerhead shrike occurs in a variety of shrub/grassland, open woodland, and chaparral habitats. It is a resident species throughout New Mexico and is rare to fairly common at lower and elevations and locally common at middle elevations. This species is known to be present in both Sierra and Otero Counties.

Long-legged Myotis (*Myotis volans*) - Species of Concern, BLM Sensitive

This bat primarily occurs in ponderosa pine and piñon-juniper habitats, and also occurs in grassland habitats. It uses large ponderosa pine snags, deciduous tree snags, rock crevices, mine shafts, and abandoned buildings for roosting. This migrant species is present in New Mexico from May through September. It is known to occur in Cibola, Gila, and Lincoln National Forests, White Sands Missile Range, and McGregor Range (NMDGF 1999a).

Long-eared Myotis (*Myotis evotis*) - Species of Concern, BLM Sensitive

This bat occurs in piñon-juniper and ponderosa pine habitats. The range of this species includes New Mexico, Arizona, and Utah. Within Sierra County, it is known to occur in the Cibola and Gila National Forests, but has not been identified in Otero County (NMDGF 1999a).

Longfin Dace (*Agosia chrysogaster*) - Species of Concern, BLM Sensitive

The longfin dace occurs in a variety of aquatic habitats ranging from clear, cool mountain brooks to small intermittent desert streams with a sand or gravel substrate (NMDGF 1999a). The range of this species includes New Mexico, Arizona, and Mexico. Within New Mexico, it is present in Sierra County in the Gila River drainages, and San Francisco River. It was introduced into the Rio Grande Basin downstream of the Elephant Butte Reservoir in the 1950s and is present in Percha Creek (NMDGF 1999a).

Mineral Creek Mountain Snail (*Oreohelix pilsbryi*) - Species of Concern

The Mineral Creek mountain snail inhabits an extremely small area 327 by 327 feet (100 by 100 meters) along Mineral Creek in the vicinity of the Oliver's Mine, which is approximately 5 miles north of Chloride, Sierra County (Metcalf and Smartt 1988).

Neotropic Cormorant (*Phalacrocorax brasilianus*) - New Mexico Threatened

The neotropic cormorant generally occurs in larger bodies of water, such as reservoirs. For nesting, they require stands of trees or shrubs near or in water and free from human disturbance. This bird breeds and is variable a resident in the Rio Grande Valley at the Elephant Butte and Caballo Reservoirs, and it is considered to be a vagrant in the Alamogordo area (NMDGF 1999a).

New Mexican Jumping Mouse (*Zapus hudsonius luteus*) - Species of Concern, New Mexico Threatened, BLM Sensitive

The New Mexican jumping mouse inhabits riparian areas bordering permanent streams, ditches, and wet meadows, with dry higher ground near waterways to provide for nesting and hibernation (NMDGF 1999a). The vegetation is tall, dense, and dominated by grasses and forbs. These nocturnal mammals hibernate for much of the year and are active primarily from May through September. Jumping mouse populations have declined because of wetland destruction, overgrazing, urban encroachment, and periodic severe flooding (NMDGF 1999a). This species is known to occur in the Cloudcroft area of the Sacramento Mountains in Otero County. Also it is known to occur in the Pedro Armendaris Land Grant north of Sierra County, although it has not been identified in Sierra County.

Northern Goshawk (*Accipiter gentilis*) - Species of Concern, BLM Sensitive

The northern goshawk utilizes primarily moderate to high canopied mature coniferous forests with sparse underbrush. Nest sites are selected in forest stands with a high density of large trees and canopy closure. The northern goshawk is a resident species throughout the Rocky Mountain states. It is known to occur within and adjacent to the Lincoln and Gila National Forests.

Occult Little Brown Bat (*Myotis lucifugus occultus*) - Species of Concern, BLM Sensitive

This bat occurs in ponderosa pine and mixed conifer forest habitats, as well as piñon-juniper habitats, with permanent water sources, such as streams, rivers, and lakes, where it feeds on flying insects. It is known to occur in the Cibola, Gila, and Lincoln National Forests.

Pale Townsend's Big-eared Bat (*Plecotus townsendii pallescens*) - Species of Concern, BLM Sensitive

This bat occurs in grass mountain, piñon-juniper, and arroyo habitats. It is strongly associated with caves and abandoned mine tunnels that are used by large congregations of bats as day and winter hibernation roosts, as well as for maternity colonies.

Small-footed Myotis (*Myotis ciliolabrum*) - Species of Concern, BLM Sensitive

This bat occurs in creosote rolling upland habitats. It is known to occur in Sierra and Otero Counties.

Spotted Bat (*Euderma maculatum*) - Species of Concern, BLM Sensitive

The spotted bat occurs in a variety of habitats, including grass flats, desert shrub, grass mountain, piñon-juniper, and riparian habitats. It is known to occur in Sierra County.

Texas Horned Lizard (*Phrynosoma cornutum*) - Species of Concern, BLM Sensitive

The Texas horned lizard inhabits arid and semiarid open habitats with sparse plant growth. The substrate may consist of sand, loam, hardpan, or rock, but usually with some loose soil for burying. This species occurs in Sierra and Otero Counties.

Western Burrowing Owl (*Speotyto cunicularia hypugea*) - Species of Concern, BLM Sensitive

The western burrowing owl inhabits level, open, and dry areas that are typical of low-statute grassland or desert, and that contain available burrows. They typically nest in abandoned burrows of prairie dogs, as well as ground squirrels, woodchucks, foxes, and badgers. This species is present in Sierra and Otero Counties.

White-faced Ibis (*Plegadis chihi*) - Species of Concern, BLM Sensitive

The white-faced ibis inhabits grass flats, salt flats, and riparian habitats. It nests in shoreline and marsh habitats bordered by open water. The summer breeding range of the white-faced ibis includes New Mexico, Arizona, Colorado, Oklahoma, and Utah. Within Sierra and Otero Counties, it is known to

occur in the Gila and Lincoln National Forests, White Sands National Monument, and McGregor Range (NMDGF 1999a).

White Sands Woodrat (*Neotoma micropus leucophaea*) - Species of Concern, BLM Sensitive

The White Sands woodrat inhabits lowland areas with sandy soils and burrows under large thorny shrubs (Bogan 1999). It is known to occur in the Tularosa Basin within the White Sands National Monument and the Holloman Air Force Base and is likely to occur elsewhere within the Tularosa Basin. The White Sands woodrat is potentially the same species as the southern plains woodrat (*Neotoma micropus canescens*), which occurs more commonly in eastern New Mexico, although this has not been documented (Bogan 1999).

Yuma Myotis (*Myotis yumanensis*) - Species of Concern, BLM Sensitive

This bat occurs in piñon-juniper habitats. It is known to occur in Cibola and Gila National Forests and McGregor Range.

BLM LCFO SENSITIVE SPECIES

Cornudas Mountains Land Snail (*Ashmunella amblya cornudasensis*) - BLM LCFO Sensitive

The Cornudas Mountains land snail occurs in mixed shrub mountain habitats on the Cornudas Mountains, to which it is endemic. Its distribution range extends outside the Cornudas Mountains ACEC boundaries.

Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*) - BLM LCFO Sensitive

The yellow-billed cuckoo breeds in riparian woodlands and similar habitats at lower (2,800 to 5,500 feet) to middle (5,000 to 7,500 feet) elevations. The summer breeding range includes New Mexico, Arizona, Colorado, and Utah. Within Sierra and Otero Counties, it is known to occur in the Lincoln National Forest, White Sands Missile Range, McGregor Range, and Rio Grande Valley (NMDGF 1999a).

APPENDIX D-III
SPECIAL STATUS SPECIES LIKELY TO OCCUR IN BLM's DECISION AREA AND ASSOCIATED HABITATS

General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Plant Species										
Kuenzler hedgehog cactus	<i>Echinocereus fendleri</i> var. <i>Kuenzleri</i>	FE NM Thr				X				
Sacramento prickly poppy	<i>Argemone pleiacantha</i> ssp. <i>pinnatisecta</i>	FE, NM Thr					X		X	
Todsen's pennyroyal	<i>Hedeoma todsenii</i>	FE w/CH NM Thr				X				
Duncan's cory cactus (Duncan's pincushion cactus)	<i>Coryphantha duncanii</i>	SC NM End		X	X				X	
Glass Mountain coral-root	<i>Hexalectris nitida</i>	SC NM End BLMS				X				

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General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Wright's marsh thistle	<i>Cirsium wrightii</i>	SC							X	
Desert night-blooming cereus	<i>Cereus greggii</i> var. <i>greggii</i>	SC NM End BLMS		X			X			
Guadalupe rabbitbrush	<i>Chrysothamnus nauseosus</i> var. <i>texensis</i>	SC BLMS	X				X			
Fish hook barrel cactus	<i>Ferocactus hamatacanthus</i> var. <i>hamatacanthus</i>	BLMS	X	X	X					
Grama grass cactus	<i>Toumeyia papyracanthus</i>	BLMS	X							
Guadalupe Mountains mescal bean	<i>Sophora gypsophila</i> var. <i>guadalupensis</i>	BLMS	X			X	X			

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General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Sheer's cory cactus	<i>Coryphantha scheeri</i> var. <i>uncinata</i>	NM End		X						
Gray sibara	<i>Sibara grisea</i>	LCFOS	X							
Gypsum blazingstar	<i>Mentzelia humilis</i> var. <i>guadalupensis</i>	LCFOS			X					
Gypsum ringstem	<i>Anulocaulis gypsogenus</i> var. <i>howardii</i>	LCFOS			X					
Roetter's hedgehog cactus	<i>Echinocereus X Roetteri</i> var. <i>Roetteri</i>	LCFOS	X	X						
Mosquito plant	<i>Agastache cana</i>	NM Rare				X				
Animal Species										
American peregrine falcon	<i>Falco peregrinus anatum</i>	FE NM Thr	X	X	X	X	X		X	

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General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Interior least tern	<i>Sterna antillarum</i>	FE							X	
Northern aplomado falcon	<i>Falco femoralis septentrionalis</i>	FE Nm End	X	X						
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE w/PCH							X	
Bald eagle	<i>Haliaeetus leucocephalus</i>	FT NM Thr	X	X			X		X	
Arctic peregrine falcon	<i>Falco peregrinus tundrius</i>	FT (S/A)	X	X	X	X	X		X	
Mexican spotted owl	<i>Strix occidentalis lucida</i>	FT	X			X	X		X	
Mountain plover	<i>Charadrius montanus</i>	PT	X							

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SPECIAL STATUS SPECIES LIKELY TO OCCUR IN BLM's DECISION AREA AND ASSOCIATED HABITATS

General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Arizona black-tailed prairie dog	<i>Cynomys ludovicianus arizonensis</i>	C BLMS	X							
Chiricahua leopard frog	<i>Rana chiricahuensis</i>	C BLMS							X	
Arizona southwestern toad	<i>Bufo microscaphus microscaphus</i>	SC BLMS							X	
Baird's sparrow	<i>Ammodramus bairdii</i>	SC NM Thr BLMS	X	X			X		X	
Big free-tailed Bat	<i>Nyctinomops macrotis</i>	SC BLMS		X		X			X	
Black tern	<i>Chlidonias niger</i>	SC BLMS		X						
Cave myotis	<i>Myotis velifer</i>	SC BLMS	X	X		X			X	

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General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Desert pocket gopher	<i>Geomys bursarius arenarius</i>	SC BLMS	X	X						
Ferruginous hawk	<i>Buteo regalis</i>	SC BLMS	X	X	X	X	X		X	
Fringed myotis	<i>Myotis thysanodes</i>	SC BLMS	X	X		X			X	
Gray-banded kingsnake	<i>Lampropeltis alterna</i>	NM End		X	X	X	X			Rocky habitats east of Tularosa Basin
Gray-footed chipmunk	<i>Tamias canipes</i>	SC BLMS				X	X			
Guadalupe southern pocket gopher	<i>Thomomys umbrinus guadalupensis</i>	SC BLMS	X	X		X				
Loggerhead shrike	<i>Lanius ludovicianus</i>	SC BLMS	X	X	X	X	X	X	X	
Long-legged myotis	<i>Myotis volans</i>	SC BLMS	X			X			X	

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SPECIAL STATUS SPECIES LIKELY TO OCCUR IN BLM's DECISION AREA AND ASSOCIATED HABITATS

General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Long-eared myotis	<i>Myotis evotis</i>	SC BLMS				X			X	
Longfin dace	<i>Agosia chrysogaster</i>	SC BLMS							X	
Mineral Creek mountainsnail	<i>Oreohelix pilsbryi</i>	SC							X	
Mottled rock rattlesnake	<i>Crotalus lepidus lepidus</i>	NM Thr		X	X	X	X			Rocky habitats east of Tularosa Basin
Neotropic cormorant	<i>Phalacrocorax brasilianus</i>	NM Thr				X				
New Mexican jumping mouse	<i>Zapus hudsonius luteus</i>	SC NM Thr BLMS							X	
Northern goshawk	<i>Accipiter gentilis</i>	SC BLMS				X			X	
Occult little brown bat	<i>Myotis lucifugus occultus</i>	SC BLMS				X			X	

APPENDIX D-III
SPECIAL STATUS SPECIES LIKELY TO OCCUR IN BLM's DECISION AREA AND ASSOCIATED HABITATS

General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Pale Townsend's big-eared bat	<i>Plecotus townsendii pallescens</i>	SC BLMS	X			X	X		X	
Small-footed myotis	<i>Myotis ciliolabrum</i>	SC BLMS	X	X	X	X	X		X	
Spotted bat	<i>Euderma maculatum</i>	SC BLMS	X	X		X			X	
Texas horned lizard	<i>Phrynosoma macrnotum</i>	SC BLMS	X	X			X		X	
Western burrowing owl	<i>Speotyto cunicularia hypugea</i>	SC BLMS	X							
White-faced ibis	<i>Plegadis chihi</i>	SC BLMS	X						X	
White Sands woodrat	<i>Neotoma micropus leucophaea</i>	SC BLMS	X	X						
Yuma myotis	<i>Myotis yumanensis</i>	SC BLMS				X			X	

APPENDIX D-III

SPECIAL STATUS SPECIES LIKELY TO OCCUR IN BLM's DECISION AREA AND ASSOCIATED HABITATS

General Information			Habitat Type							
Common Name	Scientific Name	Status	Grasslands	Desert Scrub	Montane Scrub	Woodland/ Forest	Arroyo	Malpais	Riparian/ Other Wetlands	Other (Cropland)
Cornudas Mountains Land snail	<i>Ashmunella amblya cornudasensis</i>	LCFOS			X					
Yellow-billed cuckoo	<i>Coccyzua americanus occidentalis</i>	LCFOS							X	

SOURCES:

M. Howard, Las Cruces BLM Field Office, 1999
 New Mexico Department of Game and Fish, BISON-M Database

NOTES:

Status: FE = Federally Endangered, FT = Federally Threatened, C = Federal Candidate, PE = Proposed Endangered, PT = Federally Proposed Threatened, CH = Critical Habitat designated, SC = Federal Species of Concern, NM End = New Mexico Endangered, NM Thr = New Mexico Threatened, BLMS = BLM Sensitive, LCFOS = Las Cruces Field Office Sensitive

GOVERNOR
Garv E. Johnson



DIRECTOR AND SECRETARY
TO THE COMMISSION
Gerald A. Maracchini

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

Villagra Building
P.O. Box 25112
Santa Fe, NM 87504

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December 2, 1998

Attn. Theresa Hanley
Bureau of Land Management
Las Cruces Field Office
1800 Marquess
Las Cruces, NM 88005

RE: Developing a RMPA to the White Sands Resource Management Plan to address fluid minerals
leasing in Sierra and Otero Counties. 1610 (03000).
NMGF No. 6534

Dear Ms. Hanley:

The Department of Game and Fish (Department) has reviewed the Bureau of Land Management's (BLM) scoping notice for fluid mineral leasing and development on public land in Sierra and Otero counties. The Department's concerns regard impacts on big game, small game, threatened, endangered, and sensitive, species habitats. One of our primary concerns is the potential impact of oil and gas mining activities on potential bighorn sheep transplant sites.

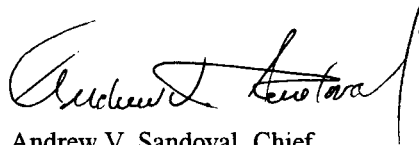
Free-ranging populations of desert bighorn sheep number 200 statewide and are distributed among six populations. No population currently exceeds 100 individuals. The Caballo, Sacramento, and Guadalupe mountains are considered potential release sites. Desert bighorn populations are not secure and remain vulnerable to innumerable impacts. The Department is still far from reaching our de-listing goal of 500 desert bighorn sheep distributed among three geographically separate populations or metapopulations, each of which numbers at least 100 sheep. Our goals are further described in *New Mexico's Long Range Plan for Desert Bighorn Sheep Management 1995-2002* (NMGF 1995).

The available literature indicates that bighorn may temporarily abandon habitat due to increased human activity resulting from mining operations, which could be critical if mining occurs on lambing grounds or water sources (Leslie and Douglas 1980; Campbell and Remington 1981). Roads built or improved for mining or other activities may provide access to previously undisturbed areas and increase potential negative impacts of people in bighorn habitat (McQuivey 1978). In the Grand Resource Area in Utah, improvement of county roads in remote, critical bighorn ranges led to increased use by hikers, mountain bikers, commercial tours, and rock climbers in bighorn habitat (BLM 1993). Lastly, roads fragment habitat that may be important for inter-mountain movements. We have similar concerns about the potential impacts of increasing human disturbance on other wildlife species, especially mule deer, antelope and small game

species, as these areas have good populations that produce a huntable surplus.

Included for your use is a list of threatened, endangered, and sensitive species existing in Sierra and Otero Counties. Thank you for the opportunity to comment on this scoping packet. Please contact Patrick Snyder, Southwest Area Wildlife/Habitat Specialist, at (505) 522-9796 if you have any questions for Sierra County or Michael Massey, Southeast Area Habitat Specialist, at (505) 624-6135 if you have any questions for Otero County.

Sincerely,



Andrew V. Sandoval, Chief
Conservation Services Division

Bureau of Land Management (BLM). 1993. City Slickers II Environmental Assessment. Ut-068-93-108. Grand Resource Area, Moab District Office. Moab, Utah. July 1993

Campbell, B. H. and R. Remington. 1981. Influence of construction activities on water use patterns of desert bighorn sheep. Wildl. Soc. Bull. 9:63-65.

Leslie, D. M., Jr. and C. L. Douglas. 1980. Human disturbance at water sources of desert bighorn sheep. Wildl. Soc. Bull. 8:284-290.

McQuivey, R. P. 1978. The desert bighorn sheep of Nevada. Nevada Dep. of Fish and Game Biol. Bull. 6, Reno. 81pp.

New Mexico Department of Game and Fish. 1995. New Mexico's long range plan for desert bighorn sheep management 1995-2002. Final Report. Fed. Aid in Wildl. Restor. Proj. W-127-R10. New Mexico Department of Game and Fish, Santa Fe. 40pp.

AVS/PS/af

cc: Lieutenant Governor Walter Bradley
Field Supervisor Ecological Services, USFS
Jerry A. Maracchini (Director, NMGF)
Scott Brown (Assistant Director, NMGF)
Steve Henry (Chief SW Area Operations, NMGF)
Mike Bell (Chief SE Area Operations, NMGF)
Jim Bailey (Assistant Chief, CSD, NMGF)
Amy Fisher (Assistant Chief, CSD, NMGF)
Patrick Snyder (SW Area Wildlife/Habitat Specialist, NMGF)
Michael Massey (SE Habitat Specialist, NMGF)
Eric Rominger (Bighorn Sheep Contractor, NMGF)

NEW MEXICAN WILDLIFE of CONCERN



STATUS & DISTRIBUTION

STATE OF NEW MEXICO: THREATENED, ENDANGERED, SENSITIVE
USFWS: THREATENED, ENDANGERED, CANDIDATE, PROPOSED, SPECIES OF CONCERN
US BUREAU OF LAND MANAGEMENT: SENSITIVE
US FOREST SERVICE: SENSITIVE
EXTIRPATED FROM NEW MEXICO
US CITES LISTED
HARVESTABLE
EXTINCT

State-wide lists: pages 3-13
County lists: pages 14-66

TABLE KEY

FWS ESA	US FISH & WILDLIFE SERVICE; ENDANGERED SPECIES ACT
NM WCA	NEW MEXICO; WILDLIFE CONSERVATION ACT
FS R3	US FOREST SERVICE; REGION 3, NEW MEXICO & ARIZONA
BLM NM	US BUREAU OF LAND MANAGEMENT, NEW MEXICO
NM Sen	NEW MEXICO; SENSITIVE (INFORMAL)
FWS SOC	US FISH & WILDLIFE SERVICE; SPECIES OF CONCERN (INFORMAL)
E	ENDANGERED
T	THREATENED
P	PROPOSED
C	CANDIDATE
R	RESTRICTED
A	THREATENED or ENDANGERED based on SIMILARITY OF APPEARANCE
S	SENSITIVE and SPECIES OF CONCERN (SOC)

ADDITIONAL INFORMATION

COMPLETE SPECIES ACCOUNTS: Information pertaining to taxonomy, status, distribution, habitat, environmental association, food habits, management practices and references for all vertebrates and selected invertebrates in New Mexico is in a database, the Biota Information System Of New Mexico (BISON-M) and maintained by the New Mexico Department of Game and Fish, Conservation Services Division. All accounts are available on the Internet World Wide Web at:

<http://www.fw.vt.edu/fishex/states/nm.htm>

or contact Jon Klingel
Conservation Services Division
New Mexico Department of Game & Fish
P.O. Box 25112
Santa Fe, New Mexico 87504

voice:505-827-9912 fax:505-827-9956
e-mail: j_klingel@gmfish.state.nm.us

Or contact the New Mexico Department of Game and Fish, Endangered Species Program in Santa Fe at (505) 827-9904.

Information on federal status species is provided as a courtesy only. We suggest you contact the indicated federal agency for specifics regarding the status of these species. Offices: USFWS, Ecological Services Office, Albuquerque; US Forest Service Region 3 Office, Albuquerque; and US Bureau of Land Management State Office, Santa Fe.

New Mexican Wildlife of Concern - Otero County

Page 1 of 2

Common Name.....	SCIENTIFIC NAME.....	FWS... ESA	NM... WCA	FS. R3	BLM.. NM	NM... Sen	FWS. SOC
Rio Grande Cutthroat Trout	Oncorhynchus clarki virginalis	-	-	S	-	S	-
Rio Grande Chub	Gila pandora	-	-	-	-	S	-
White Sands Pupfish	Cyprinodon tularosa	-	T	-	-	-	S
Sacramento Mountain Salamander	Aneides hardii	-	T	S	-	-	S
Northern Leopard Frog	Rana pipiens	-	-	S	-	-	-
Bleached Earless Lizard	Holbrookia maculata ruthveni	-	-	-	-	S	-
Texas Horned Lizard	Phrynosoma cornutum	-	-	S	S	-	S
White Sands Prairie Lizard	Sceloporus undulatus cowlesi	-	-	-	-	S	-
Little White Whiptail	Cnemidophorus inornatus gypsi	-	-	-	-	S	-
Desert Kingsnake	Lampropeltis getula splendida	-	-	S	-	-	-
Texas Longnose Snake	Rhinocœilus lecontei	-	-	S	-	-	-
Mottled Rock Rattlesnake	Crotalus lepidus lepidus	-	T	S	-	-	-
Desert Massasauga	Sistrurus catenatus edwardsii	-	-	S	-	-	-
Brown Pelican	Pelecanus occidentalis carolinensis	E	E	S	-	-	-
Neotropic Cormorant	Phalacrocorax brasilianus	-	T	S	-	-	-
American Bittern	Botaurus lentiginosus	-	-	S	-	-	-
Snowy Egret	Egretta thula brewsteri	-	-	S	-	-	-
Black-crowned Night Heron	Nycticorax nycticorax hoactli	-	-	S	-	-	-
White-faced Ibis	Plegadis chihi	-	-	S	S	-	S
Osprey	Pandion haliaetus carolinensis	-	-	S	-	-	-
Mississippi Kite	Ictinia mississippiensis	-	-	S	-	-	-
Bald Eagle	Haliaeetus leucocephalus	T	T	S	-	-	-
Northern Goshawk	Accipiter gentilis	-	-	S	S	S	S
Common Black-hawk	Buteogallus anthracinus anthracinus	-	T	S	-	-	-
Swainson's Hawk	Buteo swainsoni	-	-	S	-	-	-
Ferruginous Hawk	Buteo regalis	-	-	S	S	-	S
Aplomado Falcon	Falco femoralis septentrionalis	E	E	S	-	-	-
American Peregrine Falcon	Falco peregrinus anatum	E	T	S	-	-	-
Sora	Porzana carolina	-	-	S	-	-	-
Western Snowy Plover	Charadrius alexandrinus nivosus	-	-	S	-	-	-
Mountain Plover	Charadrius montanus	C	-	S	-	S	-
Black-necked Stilt	Himantopus mexicanus	-	-	S	-	-	-
Long-billed Curlew	Numenius americanus americanus	-	-	S	-	-	-
Interior Least Tern	Sterna antillarum athalassos	E	E	S	-	-	-
Black Tern	Chlidonias niger surinamensis	-	-	-	S	-	S
Common Ground-dove	Columbina passerina pallescens	-	E	S	-	-	-
Flammulated Owl	Otus flammeolus	-	-	S	-	-	-
Burrowing Owl	Athene cunicularia hypugaea	-	-	-	S	-	S
Mexican Spotted Owl	Strix occidentalis lucida	T	-	S	-	S	-
Elegant Trogon	Trogon elegans canescens	-	E	S	-	-	-
Belted Kingfisher	Ceryle alcyon	-	-	S	-	-	-
Southwestern Willow Flycatcher	Empidonax traillii extimus	E	E	S	-	-	-
Loggerhead Shrike	Lanius ludovicianus	-	-	-	S	-	S
Bell's Vireo	Vireo bellii	-	T	S	-	-	-
Gray Vireo	Vireo vicinior	-	T	S	-	-	-
Gray Catbird	Dumetella carolinensis ruficrissa	-	-	S	-	-	-
American Redstart	Setophaga ruticilla tricolora	-	-	S	-	-	-
Baird's Sparrow	Ammodramus bairdii	-	T	S	S	-	S
Sprague's Pipit (no data)	Anthus spragueii	-	-	S	-	-	-
Varied Bunting	Passerina versicolor	-	T	S	-	-	-

New Mexican Wildlife of Concern - Otero County

Page 2 of 2

Common Name.....	SCIENTIFIC NAME.....	FWS.. ESA	NM... WCA	FS. R3	BLM.. NM	NM... Sen	FWS.. SOC
Western Small-footed Myotis Bat	Myotis ciliolabrum melanorhinus	-	-	-	S	S	S
Occult Little Brown Myotis Bat	Myotis lucifugus occultus	-	-	S	S	S	S
Cave Myotis Bat	Myotis velifer	-	-	S	S	S	S
Long-legged Myotis Bat	Myotis volans interior	-	-	-	S	S	S
Fringed Myotis Bat	Myotis thysanodes thysanodes	-	-	-	S	S	S
Spotted Bat	Euderma maculatum	-	T	S	S	-	S
Pale Townsend's Big-eared Bat	Plecotus townsendii pallescens	-	-	S	S	S	S
Big Free-tailed Bat	Nyctinomops macrotis	-	-	-	S	S	S
Penasco Least Chipmunk	Tamias minimus atristriatus	-	E	S	-	-	-
Gray-footed Chipmunk	Tamias canipes canipes	-	-	-	S	-	S
Gray-footed Chipmunk	Tamias canipes sacramentoensis	-	-	-	S	S	S
Arizona Black-tailed Prairie Dog	Cynomys ludovicianus arizonensis	-	-	S	S	S	S
Guadalupe Pocket Gopher	Thomomys bottae guadalupensis	-	-	S	S	S	S
Botta's Pocket Gopher (subspecies)	Thomomys bottae tularosae	-	-	-	-	S	-
Desert Pocket Gopher	Geomys arenarius brevirostris	-	-	-	-	-	S
Plains Pocket Mouse	Perognathus flavescens gypsi	-	-	-	-	S	-
Rock Pocket Mouse	Chaetodipus intermedius ater	-	-	-	-	S	-
New Mexican Jumping Mouse	Zapus hudsonius luteus	-	T	S	S	-	S
Ringtail	Bassariscus astutus	-	-	S	-	S	-
Western Spotted Skunk	Spilogale gracilis	-	-	-	-	S	-
Common Hog-nosed Skunk	Conepatus mesoleucus	-	-	-	-	S	-
Cloudcroft Checkerspot Butterfly	Ocidryas anicia cloudcrofti	-	-	-	-	S	-

NATIVE WILDLIFE APPARENTLY NO LONGER OCCURRING IN OTERO COUNTY

Rock Squirrel	Spermophilus variegatus tularosae
Mexican Gray Wolf	Canis lupus baileyi (extirpated from NM)
Grizzly Bear	Ursus arctos (extirpated from NM)
Jaguar	Panthera onca arizonensis
Merriam's Elk	Cervus elaphus merriami (extinct)
Desert Bighorn Sheep	Ovis canadensis mexicana

New Mexican Wildlife of Concern - Sierra County

Page 1 of 2

Common Name.....	SCIENTIFIC NAME.....	FWS.. ESA	NM... WCA	FS. R3	BLM.. NM	NM... Sen	FWS. SOC
Rio Grande Cutthroat Trout	<i>Oncorhynchus clarki virginalis</i>	-	-	S	-	S	-
Gila Trout	<i>Oncorhynchus gilae</i>	E	T	S	-	-	-
Longfin Dace	<i>Agosia chrysogaster</i> (native to Gila basin only in NM)	-	-	-	S	-	S
Rio Grande Chub	<i>Gila pandora</i>	-	-	-	-	S	-
Rio Grande Sucker	<i>Catostomus plebeius</i>	-	-	S	-	-	-
White Sands Pupfish	<i>Cyprinodon tularosa</i>	-	T	-	-	-	S
Arizona Toad	<i>Bufo microscaphus microscaphus</i>	-	-	S	S	S	S
Chiricahua Leopard Frog	<i>Rana chiricahuensis</i>	C	-	S	-	S	-
Northern Leopard Frog	<i>Rana pipiens</i>	-	-	S	-	-	-
Big Bend Slider	<i>Trachemys gaigeae</i>	-	-	-	-	S	-
Texas Horned Lizard	<i>Phrynosoma cornutum</i>	-	-	S	S	-	S
Desert Kingsnake	<i>Lampropeltis getula splendida</i>	-	-	S	-	-	-
Texas Longnose Snake	<i>Rhinocheilus lecontei</i>	-	-	S	-	-	-
Desert Massasauga	<i>Sistrurus catenatus edwardsii</i>	-	-	S	-	-	-
Brown Pelican	<i>Pelecanus occidentalis carolinensis</i>	E	E	S	-	-	-
Neotropic Cormorant	<i>Phalacrocorax brasilianus</i>	-	T	S	-	-	-
Great Egret	<i>Ardea alba egretta</i>	-	-	S	-	-	-
Snowy Egret	<i>Egretta thula brewsteri</i>	-	-	S	-	-	-
White-faced Ibis	<i>Plegadis chihi</i>	-	-	S	S	-	S
Mississippi Kite	<i>Ictinia mississippiensis</i>	-	-	S	-	-	-
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	T	S	-	-	-
Northern Goshawk	<i>Accipiter gentilis</i>	-	-	S	S	S	S
Northern Gray Hawk	<i>Asturina nitida maximus</i>	-	-	S	S	-	S
Common Black-hawk	<i>Buteogallus anthracinus anthracinus</i>	-	T	S	-	-	-
Swainson's Hawk	<i>Buteo swainsoni</i>	-	-	S	-	-	-
Ferruginous Hawk	<i>Buteo regalis</i>	-	-	S	S	-	S
Aplomado Falcon	<i>Falco femoralis septentrionalis</i>	E	E	S	-	-	-
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	E	T	S	-	-	-
Western Snowy Plover	<i>Charadrius alexandrinus nivosus</i>	-	-	S	-	-	-
Mountain Plover	<i>Charadrius montanus</i>	C	-	S	-	S	-
Black Tern	<i>Chlidonias niger surinamensis</i>	-	-	-	S	-	S
Common Ground-dove	<i>Columbina passerina pallescens</i>	-	E	S	-	-	-
Elf Owl	<i>Micrathene whitneyi whitneyi</i>	-	-	S	-	-	-
Burrowing Owl	<i>Athene cunicularia hypugaea</i>	-	-	-	S	-	S
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T	-	S	-	S	-
Lucifer Hummingbird	<i>Calothorax lucifer</i>	-	T	S	-	-	-
Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	S	-	-	-
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E	E	S	-	-	-
Loggerhead Shrike	<i>Lanius ludovicianus</i>	-	-	-	S	-	S
Bell's Vireo	<i>Vireo bellii</i>	-	T	S	-	-	-
Gray Vireo	<i>Vireo vicinior</i>	-	T	S	-	-	-
Sprague's Pipit	<i>Anthus spragueii</i>	-	-	S	-	-	-
Baird's Sparrow	<i>Ammodramus bairdii</i>	-	T	S	S	-	S
Varied Bunting	<i>Passerina versicolor</i>	-	T	S	-	-	-

New Mexican Wildlife of Concern - Sierra County

Page 2 of 2

Common Name.....	SCIENTIFIC NAME.....	FWS.. ESA	NM... WCA	FS. BLM.. R3 NM	NM... Sen	FWS. SOC
Western Small-footed Myotis Bat	Myotis ciliolabrum melanorhinus	-	-	-	S	S
Yuma Myotis Bat	Myotis yumanensis yumanensis	-	-	-	S	S
Occult Little Brown Myotis Bat	Myotis lucifugus occultus	-	-	S	S	S
Long-legged Myotis Bat	Myotis volans interior	-	-	-	S	S
Fringed Myotis Bat	Myotis thysanodes thysanodes	-	-	-	S	S
Long-eared Myotis Bat	Myotis evotis evotis	-	-	-	S	S
Pale Townsend's Big-eared Bat	Plecotus townsendii pallescens	-	-	S	S	S
Gunnison's Prairie Dog	Cynomys gunnisoni	-	-	-	S	-
Botta's Pocket Gopher (subspecies)	Thomomys bottae opulentus	-	-	-	S	-
Pecos River Muskrat	Ondatra zibethicus ripensis	-	-	-	S	S
Ringtail	Bassariscus astutus	-	-	S	-	S
Common Hog-nosed Skunk	Conepatus mesoleucus	-	-	-	S	-
Chihuahuan Pronghorn	Antilocapra americana mexicana	-	-	S	-	-
Desert Bighorn Sheep	Ovis canadensis mexicana (endangered pops)	-	E	S	-	-
Mineral Creek Mountainsnail	Oreohelix pilsbryi	-	T	-	-	S
Southwest. Pearly Checkerspot Butterfly	Charidryas acastus sabina	-	-	-	-	S
Obsolete Viceroy Butterfly	Basilarchia archippus obsoleta	-	-	S	-	-

NATIVE WILDLIFE APPARENTLY NO LONGER OCCURRING IN SIERRA COUNTY

American Eel	Anguilla rostrata (extirpated from NM)
Rio Grande Silvery Minnow	Hybognathus amarus
Speckled Chub	Macrhybopsis aestivalis aestivalis
Loach Minnow	Rhinichthys cobitis
Blue Sucker	Cycleptus elongatus
Gray Redhorse	Moxostoma congestum
Arizona Black-tailed Prairie Dog	Cynomys ludovicianus arizonensis
Hot Springs Cotton Rat	Sigmodon fulviventer goldmani (extinct)
Mexican Gray Wolf	Canis lupus baileyi (extirpated from NM)
Grizzly Bear	Ursus arctos (extirpated from NM)
Jaguar	Panthera onca arizonensis
Merriam's Elk	Cervus elaphus merriami (extinct)



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

Jennifer A. Salisbury
CABINET SECRETARY

11 December 1998

Leslie Ellwood
Dames and Moore
633 Seventeenth Street, Suite 2500
Denver, Colorado 80202-3625

Dear Ms. Ellwood:

This letter is regarding your request for updated information on rare plants in Sierra and Otero Counties, New Mexico. I am not aware of any new rare plant records for Sierra County. Three new plant taxa have recently been discovered in southeastern Otero County. Two are new varieties (in press) that occur on gypsum outcrops in townships T20S R17E, T21S R18E and T22S R18E. They will be named *Anulocaulis lelosolenus* var. *howardii* and *Mentzelia humilis* var. *guadalupensis*. Look for these new taxa to be published in the autumn 1999 edition of the journal *Sida* by Richard Spellenberg and Thomas Wooten. The third is a undescribed *Cryptantha* sp. nov. that is presently known only from Upper Dog Canyon in township T25S R20E. I will be conducting additional field surveys for this plant next May in the Brokeoff Mountains and intend to submit an article with its name and description to *Sida* sometime next summer. Therefore, this new species will not have a published name until about two years from now. Nevertheless, it is a very rare plant and should be considered in land management plans. If I can be of further help, contact me at (505)827-7865.

Best Regards,

A handwritten signature in black ink, appearing to read "R. Sivinski", is placed above the typed name.

Robert Sivinski
bslvinski@state.nm.us



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office

2105 Osuna NE

Albuquerque, New Mexico 87113

Phone: (505) 346-2525 Fax: (505) 346-2542

January 5, 1999

Cons#2-22-98-1-109

Leslie Ellwood
Project Biologist
Dames & Moore
633 Seventeenth Street, Suite 2500
Denver, Colorado 80202-3625

Dear Ms. Ellwood:

This responds to your letter dated November 20, 1998, requesting information on species Federally-listed or proposed to be listed as threatened or endangered occurring in Otero and Sierra Counties, New Mexico. It is our understanding that Dames & Moore, in conjunction with the Bureau of Land Management (BLM), is preparing an Environmental Impact Statement (EIS), as per National Environmental Policy Act guidance for an Fluid Minerals Resource Management Plan amendment to the existing Resource Management Plan (RMP). The proposed amendment describes fluid minerals resource planning activities to specifically address heightened interest in oil, gas, and geothermal leasing/development of BLM-managed public lands within the planning area (Otero and Sierra County).

National Environmental Policy Act requirements should be integrated with other planning and environmental review procedures so that all such procedures run concurrently rather than consecutively. As you may be aware, the U.S. Fish and Wildlife Service (Service) has recommended programmatic consultation over the effects of oil and gas leasing activities on federally-listed species (biological opinion on the Caballo RMP to Area Manager dated April 28, 1997; Cons#2-22-96-F-329). Additional information and resource concerns identified by the Service within the planning area may be found in the aforementioned biological opinion to assist in the development of the EIS document. The EIS may provide adequate consideration of Federally-listed species concerns for the selected alternative, consistent with the purposes of the Endangered Species Act (Act).

Although site-specific lists are unavailable, we have enclosed a current list of federally-endangered, threatened, candidate species, and species of concern that may be found in Otero and Sierra Counties. Under the Act, it is the responsibility of the Federal action agency or their designated representative to determine whether the proposed action "may affect" any listed or proposed species. We routinely recommend species-specific surveys during the proper breeding/flowering season and within appropriate habitat to address project-related impacts on these species. Although candidate species are not protected under the Act, the Service is required to monitor their status. If any candidate species or species of concern decline significantly, they could become listed

Ms. Leslie Ellwood

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as threatened or endangered. Therefore, actions which may contribute to the listing of these species should be avoided. We recommend including candidates and species of concern in any necessary site surveys and/or assessments.

As provided in the Act at Section 7(a)(1), all Federal agencies shall, in consultation, utilize their authorities in the furtherance of the purposes of the Act by carrying out programs for the conservation of endangered and threatened species. Therefore, as we are concerned about ensuring adverse impacts from the proposed activities are sufficiently minimized or eliminated; we are also concerned about how such resource development activities occurring within the planning area will protect and promote the recovery of listed species. For example, the planning area, which includes Otero Mesa, contains large blocks of native yucca-grassland habitat which may be essential for the recovery of the federally-endangered northern aplomado falcon (Falco femoralis septentrionalis). Depending on the location, intensity, and/or proper implementation of proposed resource development activities, such actions may prevent the reestablishment of this species into one of the few remaining suitable habitat areas in the U.S. due to habitat fragmentation or alteration. Habitat loss, in part, is a factor originally associated with the decline and subsequent listing of this falcon as endangered.

The EIS should, at a minimum, address all direct, indirect, and cumulative impacts associated with the proposed actions on important fish and wildlife, such as federally-listed species and/or their habitats. This should include efforts to minimize or eliminate adverse impacts on such resources. Cumulative impacts should include all past, present, and reasonably foreseeable future actions of Federal, State, and private activities in and/or near the planning area forming the environmental baseline. In addition, a range of viable alternatives including the no-action alternative should be explored and objectively evaluated to provide clear options to the decisionmaker and the public.

We appreciate the opportunity to provide important pre-project planning information to assist in adequate consideration of New Mexico's unique heritage of rare wildlife and habitats. We recommend contacting the New Mexico Department of Game and Fish and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry and Resources Conservation Division for information concerning fish, wildlife, and plants of State concern. We look forward to reviewing a copy of the draft EIS, when it becomes available. If we can be of any further assistance, please contact Chris Perez of my staff at the letterhead address above or at telephone extension 119.

Sincerely,



Jennifer Fowler-Propst
Field Supervisor

Ms. Leslie Ellwood

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Enclosure

cc: (w/o enc)

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico

Director, New Mexico Forestry and Resources Conservation Division, Santa Fe, New Mexico

Mike Howard, BLM, Las Cruces, New Mexico

Threatened, Endangered, Candidate Species,
and Species of Concern
Otero and Sierra counties, New Mexico
October 27, 1999

Otero

Northern aplomado falcon, Falco femoralis septentrionalis, E
Kuenzler hedgehog cactus, Echinocereus fendleri var. kuenzleri, E
Sacramento prickly poppy, Argemone pleiakantha ssp. pinnatisecta, E
Todsens's pennyroyal, Hedeoma todsenii, E
Southwestern willow flycatcher, Empidonax traillii extimus, E
Interior least tern, Sterna antillarum athalassos, E
Black-footed ferret, Mustela nigripes, E**
Bald eagle, Haliaeetus leucocephalus, T
Mexican spotted owl, Strix occidentalis lucida, T
Sacramento Mountains thistle, Cirsium vinaceum, T
Mountain plover, Charadrius montanus, PT
Big free-tailed bat, Nyctinomops macrotis (= Tadarida m., T. molossa), SC
Black-tailed prairie dog, Cynomys ludovicianus, SC
Cave myotis, Myotis velifer, SC
Desert pocket gopher, Geomys bursarius arenarius, SC
Fringed myotis, Myotis thysanodes, SC
Gray-footed chipmunk, Tamias canipes, SC
Greater western mastiff bat, Eumops perotis californicus, SC
Guadalupe southern pocket gopher, Thomomys umbrinus guadalupensis, SC
Long-legged myotis, Myotis volans, SC
New Mexican meadow jumping mouse, Zapus hudsonius luteus, SC
Occult little brown bat, Myotis lucifugus occultus, SC
Pale Townsend's (= western) big-eared bat, Plecotus townsendii pallescens, SC
Small-footed myotis, Myotis ciliolabrum, SC
Spotted bat, Euderma maculatum, SC
White Sands woodrat, Neotoma micropus leucophaea, SC
American peregrine falcon, Falco peregrinus anatum, SC
Arctic peregrine falcon, Falco peregrinus tundrius, SC (S/A)
Baird's sparrow, Ammodramus bairdii, SC
Black tern, Chlidonias niger, SC
Ferruginous hawk, Buteo regalis, SC
Loggerhead shrike, Lanius ludovicianus, SC
Northern goshawk, Accipiter gentilis, SC
Western burrowing owl, Athene cunicularia hypugaea, SC
White-faced ibis, Plegadis chihi, SC
Yellow-billed cuckoo, Coccyzus americanus, SC
White Sands pupfish, Cyprinodon tularosa, SC
Sacramento mountain salamander, Aneides hardii, SC
Texas horned lizard, Phrynosoma cornutum, SC
Sacramento Mountains checkerspot butterfly, Euphydryas anicia cloudcrofti, SC
Sacramento Mountains silverspot butterfly, Speyeria atlantis capitaneensis, SC

Otero, Cont'd

Sacramento Mountains blue butterfly, Icaricia icarioides (new subspecies), SC
 Alamo beardtongue, Penstemon alamosensis, SC
 Desert night-blooming cereus, Cereus greggii var. greggii, SC
 Goodding's onion, Allium gooddingii, SC
 Guadalupe rabbitbrush, Chrysothamnus nauseosus var. texensis, SC
 Gypsum scalebroom, Lepidospartum burgessii, SC
 Sierra Blanca cliffdaisy, Chaetopappa elegans, SC
 Villard's pincushion cactus, Escobaria villardii, SC
 Wright's marsh thistle, Cirsium wrightii, SC

Sierra

Northern aplomado falcon, Falco femoralis septentrionalis, E
 Southwestern willow flycatcher, Empidonax traillii extimus, E
 Todsens's pennyroyal, Hedeoma todsenii, E w/CH
 Gila trout, Oncorhynchus gilae, E
 Black-footed ferret, Mustela nigripes, E**
 Bald eagle, Haliaeetus leucocephalus, T
 Mexican spotted owl, Strix occidentalis lucida, T
 Whooping crane, Grus americana, XN
 Chiricahua leopard frog, Rana chiricahuensis, C
 Black-tailed prairie dog, Cynomys ludovicianus, SC*
 Fringed myotis, Myotis thysanodes, SC
 Greater western mastiff bat, Eumops perotis californicus, SC
 Long-eared myotis, Myotis evotis, SC
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 White Sands woodrat, Neotoma micropus leucophaea, SC
 Yuma myotis, Myotis yumanensis, SC
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 Western burrowing owl, Athene cunicularia hypugaea, SC
 White-faced ibis, Plegadis chihi, SC

Sierra, cont'd

Yellow-billed cuckoo, Coccyzus americanus, SC
 Desert sucker, Catostomus clarki, SC
 Longfin dace, Agosia chrysogaster*, SC
 Sonora sucker, Catostomus insignis, SC
 Speckled dace, Rhinichthys osculus (Gila drainage), SC
 White Sands pupfish, Cyprinodon tularosa, SC
 Arizona southwestern toad, Bufo microscaphus microscaphus, SC
 Texas horned lizard, Phrynosoma cornutum, SC
 Desert viceroy butterfly, Limenitis archippus obsoleta, SC
 Mineral Creek mountainsnail, Oræohelix pilsbryi, SC
 Duncan's cory cactus, Coryphantha duncanii, SC
 Pinos Altos fameflower, Talinum humile, SC
 Sandhill goosefoot, Chenopodium cycloides, SC

Index

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PE w/CH	=	Proposed Endangered with critical habitat
T	=	Threatened
PT	=	Proposed Threatened
PT w/CH	=	Proposed Threatened with critical habitat
PCH	=	Proposed critical habitat
C	=	Candidate Species (taxa for which the Service has sufficient information to propose that they be added to list of endangered and threatened species, but the listing action has been precluded by other higher priority listing activities).
SC	=	Species of Concern (taxa for which further biological research and field study are needed to resolve their conservation status)
S/A	=	Similarity of Appearance
*	=	Introduced population
XN	=	Nonessential experimental
**	=	Survey should be conducted if project involves impacts to prairie dog towns or complexes of 200-acres or more for the Gunnison's prairie dog (<u>Cynomys gunnisoni</u>) and/or 80-acres or more for any subspecies of Black-tailed prairie dog (<u>Cynomys ludovicianus</u>). A complex consists of two or more neighboring prairie dog towns within 4.3 miles (7 kilometers) of each other.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525 Fax: (505) 346-2542

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October 27, 1999

Cons. #2-22-99-I-478

Memorandum

To: Field Manager, Bureau of Land Management (BLM), Las Cruces, New Mexico
(Attn: Mike Howard)

From: Field Supervisor, New Mexico Ecological Services Field Office, U.S. Fish and
Wildlife Service (Service), Albuquerque, New Mexico

Subject: Draft Resource Management Plan Amendment (RMPA)/Environmental Impact
Statement: Fluid Minerals Leasing Sierra/Otero Counties, New Mexico

This responds to your request for comments on a draft outline of RMPA alternatives provided during a meeting held at our field office on September 15, 1999. Specifically, we were asked to focus on the adequacy of the range of alternatives in addressing important fish and wildlife resources, including federally-listed species. The purpose of the RMPA is to address future oil, gas, and geothermal leasing and development on public lands in Sierra and Otero counties involving 2.4 million surface acres administered by the BLM and 3.7 acres of Federal mineral estate. Although environmental planning documents were prepared in the 1980s for minerals leasing within that area, increased nominations for oil/gas leasing, particularly in species sensitive areas has prompted a re-evaluation.

Due to some recent species status changes, we have enclosed an updated list of federally-endangered, threatened, candidate species, and species of concern that may occur within the study area. Although candidate species are not protected under the Act, the Service is required to monitor their status. If any candidate species or species of concern decline significantly, they could become listed as threatened or endangered. Therefore, actions which may contribute to the listing of these species should be avoided. We recommend including candidates and species of concern in any necessary site surveys and/or assessments.

It is our understanding that the RMPA will determine where and under what conditions oil, gas, and geothermal leasing, exploration, and development will be permitted within the 20-year plan period. In addition, these determinations will identify certain stipulations attached to minerals leases for the adequate consideration for sensitive resources. Three alternatives were submitted for our review and are defined as follows:

No-action alternative--the continuation of management according to the RMP on a case-by-case National Environmental Policy Act (NEPA) analysis; *Alternative A*--management emphasis on mitigation of impacts which would predictably result from case-by-case NEPA analysis and; *Alternative B*--management emphasis on avoidance of impacts and restrictions which would emphasize resource protection. The preferred alternative was identified as Alternative A.

According to 40 CFR part 1502.14, agencies must rigorously explore and evaluate all reasonable alternatives, including those alternatives outside the jurisdiction of the lead agency. NEPA alternatives should provide for a full spectrum of analysis and provide clear choices. In this case, all three alternatives appear closely related partly because all three choices result in the implementation of the proposed action. The preferred alternative provides for an emphasis on mitigation of impacts associated with the no-action alternative while Alternative B emphasizes resource protection. However, mitigation should probably not be regarded as a first step or as an emphasis of any particular alternative. Mitigation should be the last step in a process that begins first with adequate planning to avoid the impact.

The Service recommends an additional alternative that would include a true "no-action" alternative (e.g., no further mineral leasing activities). Inclusion of this analysis should provide a benchmark in order to allow decisionmakers the opportunity to compare the full magnitude of the environmental effects of each alternative, particularly in light of numerous identified resource issues and ongoing uses within the study area. And, this would exemplify an alternative outside the jurisdiction of the agency, which must be satisfied according to 40 CFR Part 1502.14. All of the alternatives, particularly the preferred alternative, should specifically discuss the range and types of stipulations available that would result in a clearer separation of each alternative. It is our understanding that the majority of interest in oil/gas leasing within the study area is on or near Otero Mesa, Otero County, New Mexico. This may also affect the choice of alternatives and should be addressed.

As indicated in our biological opinion dated April 28, 1997, on the BLM's resource management plan (Cons#2-22-96-F-329), the Service is primarily concerned with the existing effects from ongoing livestock grazing combined with habitat loss and fragmentation associated with extensive oil and gas leasing. This concern applies to desert grassland species that would include the federally-endangered northern aplomado falcon (*Falco femoralis septentrionalis*). Perhaps the most important decimating factor attributed to the decline of the aplomado falcon in the U.S. is habitat loss/degradation. In the U.S., Otero Mesa is one of the few remaining large expanses (particularly on public lands) of remnant Chihuahuan desert grassland. In the Southwest, the aplomado falcon depends on the desert grassland ecosystem and wherever it remains, is essential habitat for the falcon. Therefore, Otero Mesa (including McGregor Range) is a high priority recovery area for the falcon because of the combination of its overall size, relatively unfragmented natural condition, and its proximity to breeding aplomado populations in nearby Mexico. The falcon has historically (1917) and recently

(1991, 1993, 1997, and 1999) been reported within Otero County. The 1999 sighting was confirmed on Otero Mesa by a qualified ornithologist.

The 1990 aplomado falcon recovery plan states that, "...suitable habitat in the United States and Mexico should be identified and protected..." and goes on to stress that, "Particular attention should be directed toward suitable habitat on public lands." Section 7(a)(1) of the Act calls for all Federal agencies to utilize their authorities to further the purposes of the Act by carrying out programs for the conservation of endangered and threatened species. To date, no such programs are in effect for areas such as Otero Mesa that are now under increased pressure for oil/gas development. Additionally, according to 40 CFR Part 1500.1, the NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.

We strongly advise the BLM to develop a conservation program for listed species consistent with Section 7(a)(1) within the study area with an emphasis on the endangered aplomado falcon and Otero Mesa. The elements of such a plan could include delineating areas important for aplomado falcon recovery as well as other sensitive species/resources as areas of critical environmental concern. This should also assist you in compliance with Section 7(a)(2) (consultation requirement). Baseline analyses or the "affected environment" should take into account ongoing livestock grazing programs and associated facilities. Cumulative effects assessments should be projected over the plan's 20-year period. Assuming minerals leasing will be undertaken, a reasonable effort should be made to determine at what level of oil/gas development and other human activity may be tolerated without adversely affecting the aplomado falcon or the integrity of its habitat. Other special status and/or listed species concerns in the remaining portions of the analysis area should be addressed (if not already considered within the RMP) with respect to the proposed action.

We appreciate the opportunity to provide comments and look forward to continued cooperation on compliance with the National Environmental Policy Act and the Endangered Species Act. In reference to the above, please contact Chris Perez of my staff at (505) 346-2525, extension 119.



Jennifer Fowler-Propst

Attachment

cc (w/o attachment):

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico

Threatened, Endangered, Candidate Species,
and Species of Concern
Otero and Sierra Counties, New Mexico
January 5, 1999

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Northern aplomado falcon, Falco femoralis septentrionalis, E
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 Interior least tern, Sterna antillarum athalassos, E
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 Sacramento Mountains thistle, Cirsium vinaceum, T
 Arizona black-tailed prairie dog, Cynomys ludovicianus arizonensis, SC
 Big free-tailed bat, Myotis macrotis (= Tadarida m., T. molossa), SC
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